STATE OF CALIFORNIA

DUTY STATEMENT

OFFICE OF ENERGY INFRASTRUCTURE SAFETY

DIVISION Safety Policy Division	EFFECTIVE DATE
BRANCH/SECTION Data Analytics Branch	CLASS TITLE Research Data Specialist III
WORKING DAYS AND WORKING HOURS Monday through Friday 8:00 a.m. to 5:00 p.m.	PHYSICAL WORK LOCATION Sacramento
INCUMBENT (If know)	CURRENT POSITION NUMBER (Agency - Unit - Class - Serial) 681-400-5770-001

YOU ARE A VALUED MEMBER OF THE DEPARTMENT'S TEAM. YOU ARE EXPECTED TO WORK COOPERATIVELY WITH TEAM MEMBERS AND OTHERS TO ENABLE THE DEPARTMENT TO PROVIDE THE HIGHEST LEVEL OF SERVICE POSSIBLE. YOUR CREATIVITY AND PRODUCTIVITY ARE ENCOURAGED. YOUR EFFORTS TO TREAT OTHERS FAIRLY, HONESTLY AND WITH RESPECT ARE IMPORTANT TO EVERYONE WHO WORKS WITH YOU.

BRIEFLY (1 or 2 sentences) DESCRIBE THE POSITION'S ORGANIZATIONAL SETTING AND MAJOR FUNCTIONS:

Under the general direction of the Research Data Manager in the Data Analytics Division, the Research Data Specialist III serves as the principal technical resource person concerning research and statistical analysis involving the assessment of wildfire mitigation strategies, such as the composition and magnitude of current and future trends, relevant for utility planning, programs, projects, and other wildfire mitigation-related activities. The incumbent is distinguished as the primary consultant and top expert to management on procedural and policy matters involving the use and analysis of wildfire mitigation and operational data.

% of time performing duties	Indicate the duties and responsibilities assigned to the position and the percentage of time spent on each. Group related tasks under the same percentage with the highest percentage first. *(Use additional sheet if necessary)*
	ESSENTIAL FUNCTIONS:
35%	Lead development, implementation, administration, analysis and interpretation of wildfire mitigation information, and related reporting, related to assessing the quality of utility wildfire mitigation plans and the overall performance of utility wildfire mitigation activities. As the project coordinator, plan, organize and direct studies of wildfire mitigation initiatives, including the development of research questions, statistical methods/procedures, data analyses and conclusions. Conduct complex research activities (both quantitative and qualitative) in the areas of regulatory effectiveness, wildfire mitigation impacts, and field operations performance and process improvement; solicit, collect, and analyze stakeholder input; identify and evaluate options for policy development and implementation (and their associated resource needs and constraints); and consult with Division and executive staff/management on information and data obtained from the research and analysis and technical application of data analysis. Develop complex queries against utility systems utilizing tools, including Esri, Microsoft, and other commercial data analysis platforms. Develop sensitive reports related to research findings. Present research results to executive management, legislators, the public and other external stakeholders.
30%	Develop the scope of research and perform complex research and statistical methods. Synthesize and disseminate complicated data for estimating and projecting wildfire mitigation impacts and related wildfire activities necessary for Division purposes. Develop and adopt advanced analytical and statistical methodologies, including Geographic Information Systems (GIS) methods, for collecting, compiling, and analyzing data for analyzing wildfire mitigation impacts, such as compliance, fire threat, infrastructure, environmental, and demographic information. These analyses are critical input to the Division's policy recommendations, plan assessments, compliance, and other regulatory programs. Utilize computer programs, including GIS, Excel, and other data analysis tools to formulate analyses within specified boundaries. Prepare and develop spatial information for data analysis, policy analysis, and wildfire mitigation plan assessments.
20%	Plan, organize, conduct, and perform studies using complicated research methods and techniques, particularly GIS and other programming capabilities, to facilitate the rapid handling of data at a level of detail required by the Division. Assess impacts resulting from changes in data values and/or planning assumptions. Maintain linkages between different geographic areas, including those of the United States Census, utility service territory boundaries, metropolitan areas, and other political subdivisions of the state.

5%	Participate in the analysis and preparation of wildfire mitigation plan assessments as required by the Division. As directed, prepare technical papers and provide input to more comprehensive planning reports prepared by others.
5%	This position participates in interagency workgroups, leads development of data/reporting tools, and advises on agreements, legislation, and regulation efforts.
5%	**MARGINAL FUNCTIONS:** Other job-related duties as required.
	KNOWLEDGE AND ABILITIES [*From Class Specs***]** **Knowledge of:** Data analysis methods and techniques including gathering and collection of structured and unstructured data, as well as general principles, concepts and terminology used in research; planning studies and investigations; trend analysis procedures; time management techniques to provide for efficient prioritization and completion of projects and assignments; software to prepare spreadsheet summaries, reports, charts, and tables; basic arithmetic and statistical techniques to analyze numerical data; and departmental policies and procedures. Design and implement research-related projects; practices required to ensure and maintain data security, including securely transmitting confidential data; experimental design procedures; problem-solving techniques and processes to identify and resolve issues related to the completion of work assignments; and advanced mathematical techniques and descriptive statistical analysis techniques and methods. Principles and concepts applied in research and statistical settings; principles and concepts appropriate to data and research techniques and methodologies; operations research methods; current data analytics processes, including the utilization of business intelligence software programs; broad principles of algorithms, data structures, and data management; application of computerized models to research data, statistical and other methods used in the analysis; survey methods and analytical techniques; organizational analysis including data presentation and interpretation; principles and procedures of forecasting, and of research planning, design, methodology; problem solving techniques and processes to facilitate the identification and resolution of issues related to the completion of work assignments. State, federal and departmental regulations; benefit-cost analysis; complex database design and structure to understand and complete research projects and assignments; and project management principles in order to design projects (e.g., define schedules, tasks, milestones, deliverables). Advanced automated processes for capturing data and applying quality control procedures to design and implement complex research projects; current leadership techniques and their application to ensure effective oversight of project team members; project management principles to monitor project progress, and conduct final project evaluation; and function as lead for complex large scale research projects. **Ability to:** Research, gather, compile, and analyze structured and unstructured data; conduct and interpret descriptive statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; prepare research and statistical reports; analyze written and numerical data regarding general governmental problems; speak and write effectively; develop and evaluate alternatives, recommendations, solutions, and conclusions or approaches to research problems; manage a workload consisting of multiple projects and assignments; complete work under critical timelines to meet project. objectives and deadlines; be objective and flexible to adapt to changes in priorities and work assignments; and gain and maintain the confidence and cooperation of others, collaborate, and work in multidisciplinary teams. Query, mine, analyze, and manipulate data; communicate effectively both orally and in writing to individuals and groups related to the area of research; present ideas and information effectively; adapt and apply formal research methods and principles to research problems; design and validate studies and analyze the accuracy of data collected; analyze quantitative and qualitative data to reach sound conclusions and/or make recommendations; identify improvements and originate and develop new solutions which depart from traditional and existing patterns; identify required data, information, materials, and resources needed to complete/perform a project; reason logically and creatively and use a variety of analytical techniques to resolve or provide information regarding complex research and data problems; consult with and advise administrators or other interested parties on a wide variety of subject-matter areas; recognize when issues, activities, and/or decisions need to be elevated to management, and communicate information effectively to others. Plan and carry out large scale research and data projects; prepare and present reports and data models; adapt and apply complex

research methods and principles to research problems of an applied practical nature; identify required data, information, materials, and resources needed to complete/perform a project; identify data needs of complex analyses and evaluate adequacy of existing data to meet these needs; develop procedures for collection and integration of data sources; design and test complex data base structures for storage and manipulation; access and process data located on large databases, servers, mainframes and/or desktop computers; design and conduct a complex research project and/or validating studies; conduct program evaluation studies including the systematic analysis of program requirements, goals, and outcomes to ensure program effectiveness; analyze and evaluate the impact of programs, procedures, business processes, and/or policies; develop documents related to data processing and analysis procedures for research projects and assignments to be used as a future resource; determine how a system or process works and how utilizing new inputs, operations, and environmental conditions would affect outcomes; function as a technical lead for complex projects to ensure timely completion; provide technical assistance to professional personnel; establish and maintain cooperative relationships with others, and with stakeholders; communicate with internal and external stakeholders with diplomacy and tact, especially concerning difficult and sensitive issues. Translate legislatively mandated program evaluation requirements into methodically rigorous study designs; translate departmental policy into action programs and/or test the impact of policy changes; evaluate the adequacy and merit of proposed research and evaluation study designs and techniques; provide expert consultation on the feasibility impact or potential of a variety of operations, projects or proposals to the department and to other organizations; analyze and evaluate the impact of changes to existing programs, procedures, business processes, and/or policies; use creativity when independently designing research projects; and write clear and concise studies and reports; design and develop research methodologies required to ensure the collection and analysis of appropriate, meaningful, and unbiased data; conduct and interpret descriptive and/or inferential statistical analyses using appropriate software to test research hypotheses and to formulate conclusions and recommendations; analyze situations accurately and take effective action at the appropriate time; and provide mentoring to staff. Present complex quantitative and qualitative data visually using charts, graphs, tables, and other appropriate methods in order to complete reports and/or develop presentations; design and implement advanced automated processes utilizing statistical software for capturing data and applying quality control procedures to design and implement research projects work on multiple projects and assignments simultaneously to finish assignments on time and within budget; develop and prioritize short-range and long-range plans and schedules that coordinate with operating goals and objectives of the department; and facilitate meetings and discussions in a manner that ensures participants remain focused on the intended topic and encourages active participation.

WORK ENVIRONMENT, PHYSICAL OR MENTAL ABILITIES:

- Proficiency with communications-related technologies, including personal computer applications, telecommunications equipment, Internet, voicemail, email, etc.
- Dress appropriately for a business/government environment.
- Must maintain regular and acceptable attendance at such level as is determined at the Department's sole discretion.
- Occasional travel required that may include evenings, weekends, overnight or several days at a time.
- Must be regularly available and willing to work the hours the Department determines are necessary or desirable to meet its business need.

SUPERVISOR'S STATEMENT: ***I HAVE DISCUSSED THE DUTIES OF THE POSITION WITH THE EMPLOYEE***		
SUPERVISOR'S NAME (Print)	SUPERVISOR'S SIGNATURE	DATE

EMPLOYEE'S STATEMENT: ***I HAVE DISCUSSED WITH MY SUPERVISOR THE DUTIES OF THE POSITION AND HAVE RECEIVED A COPY OF THE DUTY STATEMENT***		
The statements contained in this duty statement reflect general details as necessary to describe the principal functions of this job. It should not be considered an all-inclusive listing of work requirements. Individuals may perform other duties as assigned, including work in other functional areas to cover absence of relief, to equalize peak work periods or otherwise balance the workload.		
EMPLOYEE'S NAME (Print)	EMPLOYEE'S SIGNATURE	DATE